REMARKS

Claims 1-34 are pending. Claims 1, 17 and 25 are the independent claims.

Independent claim 25 is allowed (page 4 of action).

Independent claims 1 and 17 stand rejected as anticipated by Sommargren (US 4,594,003).

With respect to independent claim 1, we submit that Sommargren does not disclose "a system controller ... further programmed to calculate the radius of curvature of a surface of the measurement object from the monitored optical interference pattern," as recited in claim 1. In fact, Sommargren never even uses the words "radius" or "radii" in his specification.

Evidently, the Action concedes that this feature is missing from Sommargren, but argues that "[t]he limitations are functional and as the claims do not invoke 35 U.S.C. 112, 4th paragraph by using a means-plus-function format the functional limitations do not further limit the claimed invention" (page 3 of Action). We respectfully disagree. We are aware no authority that stands for this position, nor does the Action cite any.

To the contrary, the Federal Circuit explicitly states: "A patent applicant is free to recite features of an apparatus either structurally or functionally." In re Schreiber, 128 F.3d 1473, 1478 (Fed. Cir. 1997) (citing In re Swinehart, 439 F.2d 210, 212, (CCPA 1971)). When an applicant limits a claim to structure for performing a recited function, the applicant need only demonstrate that the structure found in the prior art does not perform the recited function. Id.; In re Swinehart, 439 F.2d at 213. Therefore, functional language in a claim must not be ignored categorically. Instead, it must be read to limit the claimed structure and must be considered in light of the prior art.

Furthermore, such functional language is not limited to mean-plus-function elements. For example, the element at issue in In re Schreiber was a "taper of the [dispensing] top being uniform and such as to by itself jam up the popped popcorn before the end of the cone and permit the dispensing of only a few kernals at a shake of a package when the top is mounted on the container." In re Schreiber, 128 F.3d at 1475 and 1478. Similarly, the element at issue in In re Schreiber was "[a] new composition of matter, transparent to infra-red rays ..." In re

Swinehart, 439 F.2d at 211. Moreover, we submit that it is well-establish in the electronic arts that a person creates a new, patentable machine when the person programs the machine (e.g., a computer) to perform a function that it has not previously performed, such as is the case here. Accordingly, we respectfully ask the Examiner to withdraw the rejection.

With respect to independent claim 17, we submit that Sommargren fails to disclose "a wavelength change monitor configured to monitor a change in the characteristic wavelength of the radiant energy beam," as recited in claim 17. Indeed, the Action is silent as to where it finds any such monitor in Sommargren (see pages 2 and 3 of Action). To the contrary, the Action indicates that the claimed wavelength change monitor is not disclosed in Sommargren because it states that dependent claim 10, which similarly recites a wavelength change monitor, would be allowable if rewritten in independent form (see page 4 of Action). Accordingly, we respectfully ask that the Examiner withdraw the rejection.

The only remaining rejections are prior art rejections of dependent claims, which we submit are allowable for at least those reasons set forth above for the independent claims.

Finally, we have amended the title to more clearly indicate the invention to which the claims are directed.

Applicant asks that all claims be allowed.

Enclosed is a $55.00 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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***See attached document certifying that Marc M. Wefers has limited recognition to practice before the U.S. Patent and Trademark Office under 37 C.F.R. § 10.9(b).**

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